

REFERENCES



1. Cunningham FG, MacDonald PC, Gant NF, Leveno KJ, Gilstrap LC. Williams Obstet. 19th edition. Englewood Cliffs: Prentice-Hall International inc. (1993), pp 939-957.
2. Harrison MR, Golbus MS, Filly RA. The Unborn Patient prenatal Diagnosis and Treatment. 2nd edition. Philadelphia: W.B. Saunders Company., 1991) pp 58-62.
3. Breed ASPM., Mantingh A, Voster R, Beekhuis JR, Van Lith JMM., Anders JPA. Follow-up and Pregnancy Outcome After a Diagnosis of Mosaicism in CVS. Prenat. Diagn. 11(1991):577.
4. Firth HV, Boyd PA, Chamberlain P, Mackenzie IZ, Lindenbaum RH, Huson SM. Severe Limb Abnormalities After Chorion Villus Sampling at 56-66 day Gestation. Lancet 337(1991):762-63.
5. Evans MI, Drugan A, Koppitch FC, Zador IE, Sacks AJ, Sokol RJ. Genetic Diagnosis in The First Trimester: The norm for The 1990s. Am J Obstet Gynecol 160(1989):1332-9.
6. Drugan A, Syner FN, Greb A, Evans MI, Amniotic Fluid Alpha-Fetoprotein and Acetylcholinesterase in Early Genetic Amniocentesis. Obstet Gynecol 72(1988):35-38.
7. Crandall BF, Hanson FW, Tennant F, Perdue ST. Alpha - Fetoprotein Levels in Amniotic Fluid Between 11 and 15 Weeks. Am J Obstet Gynecol 160(1989): 1204-6.
8. Nelson MM. Amniotic fluid volumes in early pregnancy. The journal of obstet and gynaecol of the British Commonwealth 79(1972):50-53.
9. Benacerraf BR, Greene MF, Saltzman DH, Barss VA, Penso CA, Nadel AS, et al. Early Amniocentesis for prenatal

- Cytogenetic Evaluation. Radiology 169(1988):709-10.
10. Rooney DE, Maclachlan N, Smith J, Rebello MT, Loeffle FE, Beard RW, Rodeck C, Coleman DV. Early Amniocentesis : a Cytogenetic Evaluation. BMJ 299(1989):25.
 11. Kerber s, Held KR. Early Genetic Amniocentesis - 4 Years' experience. Prenat Diag 13(1993):21-7.
 12. Henry GP, Miller WA. Early Amniocentesis. J of Repro Med 37(1992):396-402.
 13. Johnson A, Godmilow L. Genetic Amniocentesis at 14 Weeks or Less. Clin Obstet and Gynecol 31(1988):345-52.
 14. Djalali M, Barbi G, Kennerknecht I, Terinde R. Introduction of Early Amniocentesis to Routine Prenatal Diagnosis. Prenat Diagn 12(1992):661-9.
 15. Hanson FW, Zorn EM, Tennant FR, Marianos S, Samuel S. Amniocentesis Before 15 weeks' gestation : Outcome, Risks, and Technical Problems. Am J Obstet Gynecol 156(1987):1524-31.
 16. Penso CA, Sandstrom MM, Garber MF, Ladoulis M, Stryker JM, Benacerraf BB. Early Amniocentesis: Report of 407 Cases With Neonatal Follow-Up. Obstet Gynecol 76(1990):1032-6.
 17. Hanson FW, Happ RL, Tennant FR, Hune S, Peterson AG. Ultrasonography-Guided Early Amniocentesis in Singleton Pregnancies. AM J Obstet Gynecol 162(1990):1376-83.
 18. Hanson FW, Tennant F, Hune S, Brookhyser K. Early Amniocentesis: Outcome, Risks and Technical Problems at ≤ 12.8 weeks. AM J Obstet Gynecol 166(1992):1707-11.
 19. Assel BG, Lewis SM, Dickerman LH, Park VM, Jassani MN. Single-Operator Comparison of Early and Mid-Second-Trimester Amniocentesis. Obstet Gynecol

- 79(1992):940-4.
20. Elejalde B, Elejalde M, Acuna J. Prospective Study of Amniocentesis Performed Between week 9 and 16 of Gestation: Risks, Complications and Use in Early Genetic Prenatal Diagnosis. Am J Med Genet 35 (1990):188-196.
 21. Wagner G, Fuchs F. The Volume of Amniotic Fluid in The First Half of Human Pregnancy. J Obstet Gynecol 69(1962):131.
 22. Rebello MT, Gray CTH, Rooney DE, Smith JH, Hackett GA, Loeffler FE, Horwell DH, Beard RW, Coleman DV. Cytogenetic Studies of Amniotic Fluid Taken Before The 15th Week of Pregnancy For Earlier Prenatal Diagnosis: A Report of 114 Consecutive Cases. Prenat Diagn 11(1991):35-40.
 23. Byrne DL, Marks K, Brande PR, Nicholaides KH. Amnifiltration in The First Trimester: Feasibility, Technical Aspects and Cytologic Outcome. Ultrasound in Obstet and Gynecol 1(1991):320-4.
 24. Sunberg K, Smidt-Jenson S, Phillip J. Amniocentesis with Increased Cell Yield, Obtained by Filtration and Reinjection of The Amniotic fluid. Ultrasound in Obstet and Gynecol. 1(1991):91-4.
 25. Kristenson T, Mortensen TB, Nissen NI. Micropore Filters for Sterile Filtration May Leach Toxic Compounds Affecting Cell Culture. Exp Hematol 13(1985):1188-91.
 26. Sunberg K, Smidt-Jenson S, Lundsteen C, Phillip J. Early Amniocentesis with Filter Technique Improves Culture Quality and Reduces The Volume Removed. (unpublished data).



VITAE

Colonel Aphornpirom Ketupanya was born on January 26, 1947. She graduated from the faculty of Medicine, Chiangmai University in 1970. She received the Diplomate American Board of OBGYN in 1978. and Certified American Board of Maternal and Fetal Medicine in 1979. After that she received the Certificated in Prenatal Genetic in 1980 from University of California at Losangelis (UCLA) Now she is a faculty staff at Pramonkutklao Hospital.